Amendments To The Claims:

Please amend the claims as shown.

1 – 14 (canceled)

15. (new) A premix burner for burning a low-calorie combustion gas, comprising:

a pilot burner arranged coaxially with a burner axis;

a premix air duct defined by an inner duct wall and an outer duct wall arranged coaxially along the burner axis and encircling the pilot burner, and provides combustion air to the burner;

a helical device arranged in the premix air duct;

an injection device arranged downstream from the helical device that injects the low-calorie combustion gas into the premix air duct, the injection device defining a plurality of combustion gas inlet openings, each inlet opening having:

a pair of longitudinal extension walls arranged essentially parallel to a longitudinal axis defined by a flow direction of the combustion air, and

a pair of transverse extension walls arranged perpendicular to the longitudinal axis, wherein the longitudinal extension walls are greater in length than the transverse extension walls.

16. (new) The premix burner as claimed in claim 15,wherein the pair of longitudinal extension walls form an acute angle and the pair of transverse extension walls are rounded.

17. (new) The premix burner as claimed in claim 15,wherein the longitudinal extension walls are arranged parallel to a longitudinal axis defined by a flow direction of the combustion air.

18. (new) The premix burner as claimed in claim 15,wherein the longitudinal extension is 3 to 10 times the transverse extension.

19. (new) The premix burner as claimed in claim 18, wherein each inlet opening has a cross-section selected from the group consisting of: a slot, a rectangle with rounded corners and a teardrop.

20. (new) The premix burner as claimed in claim 18, wherein the burner axis and the combustion air flow direction form an angle between 0° and 90°.

21. (new) The premix burner as claimed in claim 20, wherein the injection device has a gas distribution ring that encloses the premix air duct.

22. (new) The premix burner as claimed in claim 21, wherein the premix air duct is an annular duct having an outer or inner duct wall containing a plurality of inlet openings connected to the gas distribution ring.

23. (new) The premix burner as claimed in claim 22, wherein the outer duct wall tapers in the direction of combustion air flow.

24. (new) The premix burner as claimed in claim 23, wherein the outer duct wall is cone shaped.

25. (new) A gas turbine engine, comprising:

an inlet manifold that inlets a air flow;

a compressor connected to the inlet manifold that receives the inlet air flow and compresses the air to provide a combustion air flow;

an annular combustion chamber that receives the combustion air flow and configured to combust a low-calorie fuel and provide a hot combustion flow, containing:

a pilot burner arranged coaxially with a burner axis;

a premix air duct defined by an inner duct wall and an outer duct wall arranged coaxially along the burner axis and encircling the pilot burner, and provides the combustion air flow to a premix burner;

a helical device arranged in the premix air duct;

an injection device arranged downstream from the helical device that injects the low-calorie combustion gas into the premix air duct, the injection device defining a plurality of combustion gas inlet openings, each inlet opening having:

a pair of longitudinal extension walls arranged essentially parallel to a longitudinal axis defined by a flow direction of the combustion air, and

a pair of transverse extension walls arranged perpendicular to the longitudinal axis, wherein the longitudinal extension walls are greater in length than the transverse extension walls; and

a turbine that receives and expands the hot combustion flow.

26. (new) The gas turbine as claimed in claim 25,wherein the longitudinal extension is 3 to 10 times the transverse extension.

27. (new) The gas turbine as claimed in claim 26, wherein each inlet opening has a cross-section selected from the group consisting of: a slot, a rectangle with rounded corners and a teardrop.

28. (new) The gas turbine as claimed in claim 27, wherein the burner axis and the combustion air flow direction form an angle between 0° and 90°.

29. (new) A method for burning a low-calorie combustion gas, comprising:

swirling a combustion air;

injecting the low-calorie combustion gas into the swirling combustion air through a plurality of inlet openings parallel to the flow direction of the combustion air;

mixing the low-calorie combustion gas and the swirling combustion air; and

burning the low-calorie combustion gas and the combustion air mixture.

30. (new) The method as claimed in claim 29, wherein the inlet opening shape inhibits the formation of wake regions and backflow and the inlet openings having a cross-section and the cross-section having a longitudinal extension and a transverse extension wherein the longitudinal extension is greater than the transverse extension and the longitudinal extension

is essentially parallel to the flow direction of the combustion air and the low-calorie combustion gas is injected

31. (new) The method as claimed in claim 30, wherein partially diluted combustion gas is injected into the swirling combustion air.

32. (new) The method as claimed in claim 30, wherein the low-calorie combustion gas is a gasified fossil fuel.

33. (new) The method as claimed in claim 32, wherein, the low-calorie combustion gas is a gasified coal.

34. (new) The method as claimed in claim 29, wherein the low-calorie combustion gas and the combustion air mixture are burned in a gas turbine premix burner.